

REMARKS

Claims 1-21 and 30-32 were examined. No claims are amended, added, or cancelled. Claims 1-21 and 30-32 remain in the Application. The Applicants respectfully request reconsideration of this application in view of the above amendments and the following remarks.

35 U.S.C. §102(b): Rejection of Claims 1-10, 12-20 and 30-31 with EP1022587A1

The Patent Office rejected claims 1-10, 12-20 and 30-31 under 35 U.S.C. §102(b) as anticipated by European Patent Application publication EP1022587A1 (hereinafter referred to as “EP ‘587”). Applicants respectfully submit that the claims are allowable over EP ‘587.

Claims 1-10 and 12-20

Claim 1 relates to an apparatus comprising a substrate and a coating composition on a surface of the substrate. The coating composition includes a plurality of deposited layers. Included among the plurality of deposited layers is a layer comprising a crystalline metal compound introduced through a solvent and a layer comprising a radiation curable material.

As understood by Applicants, EP ‘587 discusses an anti-reflective film including low and high refractive index layers composed of particles and polymer or cross-link polymer as a binder (e.g., Abstract). The high refractive index layer and the low refractive index layer, both contain materials that may be polymerized (see, e.g., page 19, lines 15-36). Accordingly, each layer must be cured after deposited as taught by the reference. EP ‘587 does not teach or suggest a layer including a crystalline metal compound introduced through a solvent.

In the Office Action mailed Dec. 16, 2003 (Paper No. 12), the Patent Office has stated that claim 1 is a product-by-process claim and that the patentability of the product does not depend on its method of production. The Patent Office quotes MPEP 2113, “[i]f the product in the product-by-process claim is the same as or obvious from a product of the prior art, the claim is unpatentable even though the prior product was made by a different process.” Still further, the Patent Office has stated that the process limitations within claims 1-10, 12-20, and 30-31 do not provide patentable distinction over the prior art. The Applicants respectfully submit that the apparatus defined by claim 1 is not the same as or obvious from the anti-reflective films

discussed in EP '587, and that the introducing the crystalline metal compound through the solvent does provide patentable distinction over the cited art.

Introducing the crystalline metal compound through the solvent imparts distinctive structural characteristics to the final coating composition. In particular, introducing the crystalline metal compound through the solvent creates a crystalline metal compound including discrete particles. In contrast, EP '587 discusses particles bound with a polymer. Another distinctive structural characteristic due to use of a solvent to introduce the layer comprising the crystalline metal compound is that such layer would tend to be porous as the solvent evaporates. A subsequent layer, such as a layer comprising a radiation-curable material, introduced thereon will tend to fill the pores and become a binder for the multi-layer composition.

It is simply inappropriate to ignore these distinctive structural characteristics, which are due to introducing the crystalline metal compound through the solvent. As discussed in MPEP 2113, “[t]he structure implied by the process steps should be considered when assessing the patentability of product-by-process claims over the prior art, especially where the product can only be defined by the process steps by which the product is made, or where the manufacturing process steps would be expected to impart distinctive structural characteristics to the final product.” See e.g., *In re Garnero*, 412 F.2d 276, 279, 162 USPQ 221, 223 (CCPA 1979).

For the above stated reasons, claim 1 is not anticipated by EP '587. Claims 2-10 and 12-20 depend from claim 1 and therefore include all the limitations of that claim. For at least the reasons stated with respect to claim 1, claims 2-10 and 12-20 are not anticipated by EP '587. Applicants respectfully request the Patent Office withdraw the rejection to claims 1-10 and 12-20 under 35 U.S.C. §102(b).

Claims 30-31

Claim 30 relates to an apparatus comprising a substrate including a transparent material and an anti-reflective coating composition on a surface of the substrate. The coating composition includes a plurality of deposited layers. Included among the plurality of deposited layers is a first deposited layer over the substrate. The first layer includes a colloid including particles of a crystalline metal compound and a condensation product of an organosilane. Also included among the plurality of deposited layers is a second deposited layer over the first layer.

The second layer has a different refractive index than the first layer, and the second layer comprises a radiation-curable layer. As understood by Applicants, EP '587 does not teach or suggest a layer including a colloid including particles of a crystalline metal compound and a condensation product of an organosilane.

For the above stated reasons, claim 30 is not anticipated by EP '587. Claim 31 depends from claim 30 and therefore includes all the limitations of that claim. For at least the reasons stated with respect to claim 30, claim 31 is not anticipated by EP '587. Applicants respectfully request the Patent Office withdraw the rejection to claims 30-31 under 35 U.S.C. §102(b).

35 U.S.C. §103(a): Rejection of Claims 11, 21, and 32 with EP '587 and Taniguchi

The Patent Office rejects claims 11, 21, and 32 under 35 U.S.C. §103(a) as obvious over EP '587 in view of U.S. Patent No. 4,765,729 issued to Taniguchi (Taniguchi).

Claims 11 and 21 are *prima facie* not obvious over the cited references, because the references do not disclose an apparatus including a substrate and a coating composition comprising a plurality of layers, at least one of the plurality of layers comprising a crystalline metal compound introduced through a solvent. Claim 32 is *prima facie* not obvious over the cited references, because the references do not disclose an apparatus including a substrate and a coating composition comprising a layer including a colloid including particles of a crystalline metal compound and a condensation product of an organosilane. The discussion above is relevant on this point. Taniguchi does not describe such layer. Further, there is no motivation from the cited references for such a combination.

Applicants respectfully request that the Patent Office withdraw the rejection of claims 11, 21, and 32 under 35 U.S.C. §103(a).

Conclusion

In view of the foregoing, it is believed that all claims now pending patentably define the subject invention over the prior art of record and are in condition for allowance. Applicants respectfully request that the rejections be withdrawn and the claims be allowed at the earliest possible date.

Request For Telephon Interview

The Examiner is invited to call William Thomas Babbitt at (310) 207-3800 if there remains any issue with allowance of the case.

Request For An Extension Of Time

Applicants respectfully petition for an extension of time to respond to the outstanding Office Action pursuant to 37 C.F.R. § 1.136(a) should one be necessary. Please charge our Deposit Account No. 02-2666 to cover the necessary fee under 37 C.F.R. § 1.17 for such an extension.

Charge Our Deposit Account

Please charge any shortage to our Deposit Account No. 02-2666.

Respectfully submitted,

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Dated: 4/22/04

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Nedy Calderon 4/22/04
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